Birth Control and Eugenics in Holland.

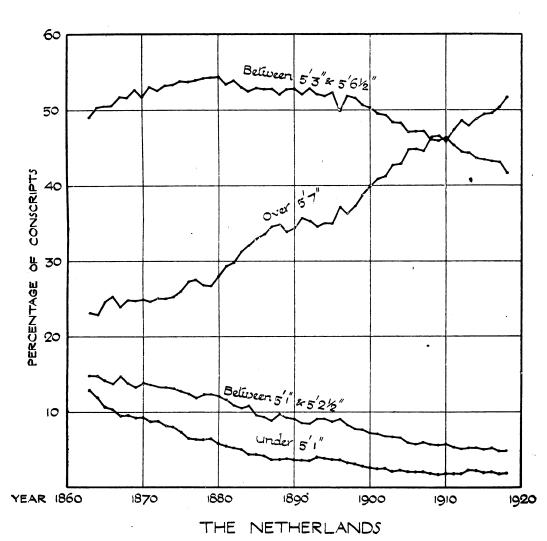
By C. V. DRYSDALE, O.B.E., D.Sc., F.R.S.E.

In my paper on "A Guiding Principle for Practical Eugenic Reform," which appeared in this Review for January last, I called attention to the fact that birth-control information had been more widely disseminated among the mass of the people in Holland than in any other country, and pointed out some of the satisfactory phenomena which have been observed in that country—notably the rapid increase in the Stature of the Dutch conscripts. But Miss van Herwerden takes exception in the last issue of the Review to the suggestion that there is any connection between this increase and the neo-Malthusian propaganda, pointing out quite correctly that the improvement in stature had started at least as early as 1863—many years before the commencement of such propaganda. She also states that this improvement has recently been arrested and indeed reversed, the proportion of conscripts over the height of 1.7 metres (5ft. 7in.) having fallen from 39.7% to 35.2% between 1884 and 1898, but in this she appears to be in error as the figures given me from official sources* show a rise from 32.95% to 37.37% in that period, and a further rise to 51.59% in 1918, without any sign of arrest. These figures are for the whole of Holland, and in order to exhibit the variations most clearly the diagram Fig. 1. has been prepared. This shows distinctly that there was a rapid reduction in the numbers of the lowest grade from 1863 onwards and that both this and the next grade have become almost evanescent in The next grade between 5ft. 3in. and 5ft. $8\frac{1}{2}$ in. the last few years. showed an increase up to 1881 followed by a steady and accelerating fall from that year, while the highest grade (above 5ft. 7in.) exhibited a slow rise up to about 1875 followed by a rapid one which shows no signs of being arrested. This is certainly a most favourable sign, to whatever cause it may be attributable. Possibly your correspondent's figures refer to Amsterdam only.

In order to form an opinion as to how far the birth-control movement in Holland has had any influence on this and other phenomena it will be well at this point to give a brief history of this movement. †Miss van Herwerden states that the neo-Malthusian propaganda had not had any influence on the population as a whole by the year 1889

^{*}Jaareijfers von h. Koninkrijk der Nederlanden bewerkt door het Centraal Bureau voor de Statistik.

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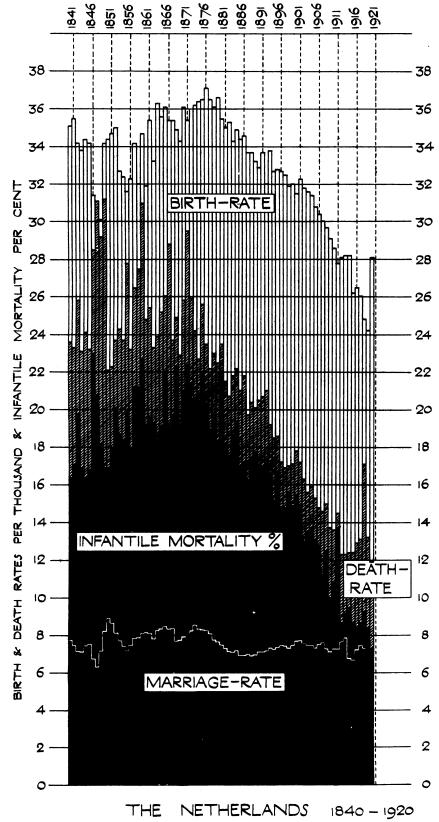
proportion of conscripts of various heights (Drawn at Age 18)

Fig. 1.

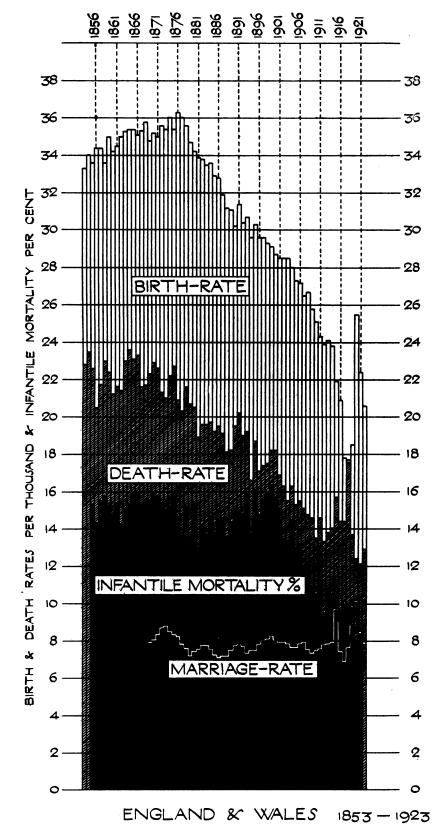
and she is certainly correct in that the organised movement in Holland did not start until that time, and its effect must have been very slow at first. But, like most other writers on this subject, she appears to have overlooked the extraordinary effect of the Bradlaugh-Besant trial of 1876, which from the biological and eugenic point of view will certainly come to be recognised as the greatest event in human history —whether for good or evil. The diagram Fig. 2. shows the course of the birth and death-rates and infantile mortality in Holland from the year 1853, and shows in common with a number of other countries that the birth-rate was rising more or less rapidly to the year 1876, after which it suddenly commenced to fall and has gone on falling to this Fig. 3 is a similar diagram for England and Wales for comparison, and these and other diagrams show clearly that in 1876 civilized humanity consciously commenced its final severance from the lower animals in determining to replace automatic by voluntary procreation, and refusing blind subjection to the struggle for existence. There can be no doubt that even without any organized propaganda this trial would have brought about a steady decline in the birth-rate, and all that any propaganda has been able to do is to accelerate the process and to try to direct it on eugenic lines.

Until recently the only two countries which have attempted the latter are England and Holland. The English neo-Malthusians were strong negative eugenists from the inception of the movement in 1877, but all their attempts at introducing birth-control to the masses were foiled by the opposition of the upper classes and more especially by the persistent hostility of the Socialists. In Holland, however, a more scientific attitude was shown, and in 1876 Dr. S. van Houten (late Minister of the Interior) wrote a strong article in favour of neo-Malthusianism in the Vragen des Tijds, and Mijnheer Greven received his doctorate in law for a dissertation on the subject; while several other prominent men, including M. Heldt the leader of the National Labour Party, enthusiastically championed the doctrine. In consequence when the International Medical Congress was held in Amsterdam in 1879, arrangements were made for the late Dr. C. R. Drysdale (President of the English Malthusian League) to address a large public meeting, and a powerful league was immediately formed which was able to commence a vigorous propaganda. Thirty-four members of the medical profession joined within the first five years, and a practical leaflet describing contraceptive methods was issued in 1886.

At the commencement of 1882, Dr. Alletta Jacobs, the first lady doctor in Holland and wife of Mijnheer Gerritsen a prominent founder of the league, opened a gratuitous clinic for poor women and children in Amsterdam and gave neo-Malthusian advice and contraceptive information; and in 1883, Dr. Mensinga a gynecologist of Flensburg, published a description of his contraceptive device which has proved the most satisfactory practical means, and which has been adopted by the Dutch league and at the centre recently opened by the New Generation League in South London. By 1892 practical instruction could be obtained by poor people in Amsterdam, Rotterdam, and Groningen, and the Dutch League entered into a period of intense activity. 35,000 practical booklets were distributed in a single year, and midwives



VARIATION OF BIRTH, DEATH & MARRIAGE RATES



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were trained and paid to give gratuitous consultations. In 1899 it was found desirable to change the personnel of the League in order to make it more popular with the masses, and Dr. and Mme. Rutgers took up the work with such success that the league now numbers about 7,700 members in a country of only about 7 million inhabitants. As the salaried midwives had not proved thoroughly satisfactory, Dr. Rutgers took the bold step of instructing lay-nurses in the best contraceptive technique, and at the present time there are about 55 of these trained women distributed among the principal towns of Holland, besides several medical practitioners who appear on the League's list as prepared to give advice. These nurses receive no salary but are allowed to charge a small fee for advice and appliances, and they are eagerly consulted by poor women.

There can be no doubt therefore that practical information has been available to the poorer clasess on a fairly large scale in Holland for many years, and we have now to consider its results; particularly

from the eugenic standpoint.

It must however be recognised from the outset that it is extremely difficult to distinguish between eugenic and environmental phenomena. The question of the height of conscripts is an obvious case in point, as it appears highly probable that height is considerably affected by nutrition, and especially at the adolescent period. Before the settlement of Europe in 1815 Holland had passed through a long period of war and economic distress, and it seems likely that this resulted in a serious diminution of stature from which she was recovering when figures first began to be published in 1863. The rising birth-rate up to 1876 which is also noticeable in many other countries was associated with an improvement in economic conditions due to the extension of industry and transport, and this no doubt had an influence on stature. The acceleration of this increase of stature from about 1879 would be considered by neo-Malthusians to be due to the fall of the birth-rate from 1876 which was accompanied by a rapid fall in the general and infantile mortality suggesting better nutrition, and consequent almost immediate effect on the young men coming up for measurement at the But of course this is a matter of opinion, and in any case it is quite obvious that such a change could only be of an environmental and not of a genetic character. When however we find the rapid relative increase of the highest grade persisting up to the present time, and contrast it with the revelations as to the physique of our own conscripts in the late war it seems reasonable to suppose that something more than purely environmental causes are at work, and that there is now some selective agency in favour of better physique. One thing however is clear-that the vigorous birth-control propaganda in Holland has certainly been accompanied by a most gratifying improvement both in the number and stature of the young men, and this decidedly appears to negative the frequently made assertions that birth control must operate for race degeneration or deterioration.

Coming now to the vital statistics themselves, Holland most certainly shows the most satisfactory progress of any country in Europe, although here again experts must decide for themselves whether it is of hereditary or environmental significance. Prior to 1876 the general

death-rate fluctuated considerably but averaged about 26 per thousand with a very slightly falling tendency. Since that time however, it has fallen rapidly and steadily and even faster than the birth-rate so that in 1912 when the birth-rate had fallen from 37 to 28 or by 9 per 1000, the death-rate had fallen to 12 or by 14 per 1000 and the rate of natural increase had risen to 16 per thousand,—the highest figure in Europe. A slight rise both of the birth-rate and the death-rate took place in 1913 & 14, followed by a rapid fall of the birth-rate and a rise of the death-rate in the war years.*

It will be seen that this compares very favourably with the corresponding figures for this country, where a fall of the birth rate from 36.3 to 22, or of 14.3 per thousand has been accompanied by a fall of the death-rate from about 21.5 to 12 or of only 9.5 per thousand, producing a diminution of the rate of natural increase from 13.8 to 10 per thousand instead of an increase to 16 per thousand as in Holland. From the Malthusian point of view this indicates a diminution of the national efficiency in our own country and an improvement in Holland, as the rate of increase according to the Malthusian theory depends upon the increase of subsistence which in turn depends upon the efficiency of production, but this point of view will not necessarily appeal to everyone. At any rate the combination of acceleration of natural increase with improved physique accompanying a rapidly falling birth-rate is of immense significance to those who fear the effect of birth-control on the military strength of a nation.

The course of the infantile mortality in Holland is also very The diagram shows that there has been a rapid and steady fall over the whole period of the declining birth-rate (with a slight arrest during the war period) and that it had fallen to only 73 per 1000 in 1920—the lowest figure in Europe. The contrast between this and our own country is striking as we had actually a rising infantile mortality from about 1881 to 1899 followed by a very rapid fall. again would be explained by neo-Malthusians on the ground that in Holland the fall of the birth-rate was made common to all classes by the freedom of dissemination of birth-control information, thus reducing poverty and overcrowding; whereas in our own country it took many years before it began to penetrate down to the artizan classes, and it was in fact about this time that the papers began to report a diminution in the supply of children to the public elementary Others will no doubt ascribe the recent fall of infantile mortality to the efforts which have been made to combat it, but it does not appear that such strenuous efforts have been necessary in Holland.

Another point of considerable importance is the comparison between the infantile mortalities of various parts of Holland, and especially between those of the urban and country districts. Taking the latter first, it is the general impression that large cities are especially prejudicial to infant life as compared with the country, but the figures for Holland show quite the reverse in recent years, as seen by the following table:—

^{*}The abnormally high death rate in 1918 which is shown also in England and other countries, is due to the great influenza epidemic.

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H olland		1881 - 85	1906—10	1912	1921
Birth Rate		34.8	$29 \cdot 6$	28 · 1	$27 \cdot 4$
Death Rate		$21 \cdot 4$	14.3	$12 \cdot 3$	11.1
Infantile Mortality		182	114	87	$76 \cdot 2$
Amsterdam (Neo-Malthus	ian I	League starte	ed 1881. Birth	Control Cli	nic 1885.)
Birth Rate		37 · 1	$\mathbf{24\cdot7}$	$23 \cdot 3$	$21 \cdot 7$
Death Rate		$25 \cdot 1$	13 · 1	$11 \cdot 2$	$10 \cdot 1$
Infantile Mortality		203	90	64	$53 \cdot 2$
The Hague (lately Headqu	uarte	rs of League	and Centre for	practical inst	ruction.)
Birth Rate		38.7	27.5	23 · 6	22.2
Death Rate		$23 \cdot 3$	$13 \cdot 2$	$10 \cdot 9$	9.5
Infantile Mortality		214	99	66	$45 \cdot 3$
Rotterdam.					
Birth Rate		$37 \cdot 4$	$32 \cdot 0$	$29 \cdot 0$	$24 \cdot 8$
Death Rate		$24 \cdot 2$	$13 \cdot 4$	11.3	$9 \cdot 2$
Infantile Mortality		209	105	79	$52 \cdot 6$

It will be seen that although the general and infantile mortality (as well as the birth-rate) was higher in the towns than in the country as a whole in the first period, the reverse is the case in 1912 & 1921, and that the infantile mortality in Amsterdam, Rotterdam, and the Hague has fallen materially below that of the Kingdom. The general death rate in the two latter towns has now fallen to practically the value of New Zealand which has for many years held the record.

Of equal interest is the comparison of the infantile mortalities in the different provinces of Holland as follows:—

		Birth Rate per 1000.			Infantile Mortality per 1000			
Province.		7	875—79	1911	Fo11	1875—79	Births.	-11 Fall.
(In order of fall of birth		1	015-19	1911	raii.	1010-10	1001-	II Pail.
			00.4	99 90	14 00	050 6	91 · 4	107.0
North Holland		• •	$38 \cdot 4$	$23 \cdot 80$	$14 \cdot 60$	$258 \cdot 6$		$\boldsymbol{167 \cdot 2}$
South Holland			$42 \cdot 3$	$28 \cdot 46$	$13 \cdot 84$	$208 \cdot 6$	$102 \cdot 9$	$105 \cdot 7$
Zeeland			$39 \cdot 6$	$27 \cdot 61$	$11 \cdot 99$	$221 \cdot 9$	$132 \cdot 2$	$89 \cdot 7$
Utrecht			$37 \cdot 5$	$27 \cdot 16$	$10 \cdot 34$	$232 \cdot 2$	$115 \cdot 6$	$116 \cdot 6$
Groningen			$36 \cdot 4$	$26 \cdot 62$	9.78	$150 \cdot 8$	$97 \cdot 6$	$\mathbf{53 \cdot 2}$
Friesland			$34 \cdot 6$	$24 \cdot 97$	$9 \cdot 63$	$140 \cdot 6$	$72 \cdot 0$	68 · 6
Gelderland	• •		$33 \cdot 3$	$27 \cdot 93$	$5 \cdot 37$	$150 \cdot 7$	$116 \cdot 6$	$34 \cdot 1$
Overijsel			$33 \cdot 6$	$28 \cdot 30$	$5 \cdot 30$	$145 \cdot 0$	$112 \cdot 3$	$\mathbf{32\cdot7}$
Drente			$34 \cdot 1$	$32 \cdot 14$	$1 \cdot 96$	$206 \cdot 1$	$173 \cdot 6$	$31 \cdot 5$
North Brabant			$33 \cdot 7$	31 · 81	$1 \cdot 89$	$122 \cdot 6$	$105 \cdot 1$	$18 \cdot 5$
Limburg			$33 \cdot 1$	$33 \cdot 05$	0.05	$157 \cdot 3$	$171 \cdot 5$	$-14 \cdot 2$
_								(increase.)

Here we see in the first place that the order as regards the fall of the infantile mortality is nearly the same as that of the fall in the birth-rate; secondly that North Holland started with the highest birth-rate and infantile mortality ending with the lowest birth-rate, and the lowest infantile mortality next to Friesland; and thirdly that Limburg (a notedly Roman Catholic province) started with the lowest birth-rate and nearly the lowest infantile mortality, but has kept its birth rate practically constant with an actual rise of the infantile mortality to the highest in Holland. Comment on these figures seems superfluous. If a low infantile mortality is regarded as a eugenic feature, the eugenic effect of birth control in Holland appears to be established beyond dispute, but it is again only fair to say that a neo-Malthusian would regard this reduction of the infantile mortality as principally due to

better environment due to the improved economic circumstances arising from smaller families.

The only other evidence bearing on eugenic questions which I have been able to obtain are the figures for still births during the last ten years:—

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Year. 1910 11 12 13 14 15 16 17 18 19 20 Still Births % of total births 3\cdot 9 3\cdot 83 3\cdot 75 3\cdot 72 3\cdot 75 3\cdot 81 3\cdot 85 3\cdot 77 3\cdot 78 3\cdot 47 3\cdot 26
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Except for the war years 1914—18 there has been a distinct reduction of the proportion of still-births, which may perhaps be taken as an indication of a reduction of venereal disease. The proportion of still-births appears to be low in comparsion with that of other countries for which I have seen figures, which would appear to indicate both a small amount of venereal disease and of attempts at abortion. The comparative figures for maternal mortality from puerperal fever which have been compiled by Miss Ettie Rout are also of interest:

		Deaths from puerperal fever per 1000			Deaths from puerperal fever per 1000
		live births			live births
The Netherlands	(1920)	$2 \cdot 4$	New Zealand	(1921)	$5 \cdot 1$
Sweden	(1917)	$2 \cdot 5$	Spain	(1918)	${\bf 5\cdot 2}$
Italy	(1917)	$3 \cdot 0$	Ireland	(1920)	$5 \cdot 5$
Norway	(1917)	$3 \cdot 0$	Switzerland	(1915)	$5 \cdot 5$
Uruguay	(1920)	$3 \cdot 4$	France	(1914)	$5 \cdot 7$
Japan	(1918)	$3 \cdot 8$	Scotland	(1919)	$6 \cdot 2$
Hungary	(1915)	4.0	United States (1	Birth	
England and Wales	(1920)	$4 \cdot 3$	Registration		
Finland	(1918)	$4 \cdot 4$	Area)	(1921)	$6 \cdot 8$
Ontario	(1919)	$4\cdot 5$	Belgium	(1919)	$7 \cdot 2$
German Empire	(1918)	$4 \cdot 9$	Chile	(1920)	$7\cdot 5$
Australia	(1920)	$5 \cdot 0$,	

In this table Holland stands at the head of the list as having the lowest maternal mortality of all countries, although Sweden runs it It is worthy of note that the United States where birthcontrol information has been, until recently, rigidly repressed, has nearly three times the maternal mortality of Holland, although Belgium which has a very low birth-rate is still worse. It would appear at any rate that sex-hygiene must be at a high level in Holland for such a favourable result to be shown; and this low mortality is one more proof of the good conditions which prevail there. This is also indicated by the much closer equality of numbers of the sexes in Holland (3,410,262 males, 3,455,052 females at the end of 1920) than in most European countries, and by the small number of emigrants It is also indicated by the averaging only about 2,500 annually. figures for wages and the cost of living which show that real wages were rising in Holland for some time before the war when they were falling in most other countries, and that this rise has been accelerated during the war period in spite of the very great rise in prices. these facts are of course only of eugenic importance in so far as they may indicate an improvement in the efficiency of the people, which, in combination with the rapid increase of population, they certainly appear to do.

A distinguished American sociologist who is scientifically interested in the birth-control question but is not a propagandist or advocate, has just been investigating this question in Holland, and informs me that he is satisfied that sex-morality is in a comparatively high state, that there is relatively little venereal disease and abortion, and that the economic and social conditions of the Dutch people are on the whole good. Unfortunately I have not been able to obtain any figures for the incidence of venereal disease, and the figures for infantile and maternal mortality must be taken as the only evidence on this From the Eugenic standpoint the most important feature would have been the comparative fertility in the various social grades and professions, but I regret that I have been unable to get any figures on this point. But the authority above mentioned agreed with my own impression that there is a much greater uniformity in the size of families in different social grades in Holland than in this country.

The bulk of the figures quoted or given in the diagrams have been taken from the official Jaarcijfers voor het Koninkrijk der Nederlanden, but those relating to the height of recruits have kindly been furnished me by Dr. J. Rutgers, to whom I am also indebted for the information concerning the history of the Dutch bith, control movement.

concerning the history of the Dutch birth-control movement.